ination in school children will reveal on the average from .2 to 1 per cent positive chests, while tuberculin testing will reveal an average of from 10 to 25 per cent reactors, thus giving a much larger field for case finding or search for spreaders of disease. There is no doubt but that routine fluoroscopy, fluorography, or x-ray have their place in case finding among adults, especially in our armed service, industry and the general hospital clinics. There can also be no doubt but that the most adequate case-finding program in our schools depends upon screening the reactors, x-raying some and making a complete follow-up of the families to locate the spreaders.

In Santa Clara County, from May, 1940, to May, 1942, 533 x-rays were taken on contacts to reactors in school surveys. Among this group 32 active or suspicious cases were found. Of these only two persons or .3 per cent were in the age group under 18; 6.4 per cent were 18 or over. The discovery of these 32 cases represents the fruit of our school survey and family follow-up.

Santa Clara County Hospital.

REFERENCE

1. Vollmer and Goldberger, E. W.: Amer. J. Dis. Child., 57:1272, 1939.

COMMUNITY EXPERIENCE *

ROBERT S. QUINN, M. D.
Santa Rosa

THE war has not confronted us with the tremendous case-finding problems created by the influx of persons into communities in which there are large war industries.

Rather, it is our problem to continue intensifying the program of tuberculosis control among our somewhat stable population.

Sonoma County is a comparatively rural community with a population of 70,000 in the 1940 census. It is probable there has been an increase of five thousand since the onset of the war. The northern portion of the county is mainly agricultural. Here we are confronted with a transient population in the fruit-picking season. The southern part of the county is confined largely to dairying and the poultry industry. In this area we find a rather stable population.

SONOMA COUNTY ENVIRONMENT

There are six incorporated communities in the county. Santa Rosa, in which the Sanatorium is located, is near the center of the county, and is surrounded by the other communities at a distance of from seven to twenty miles. It is this central location of Santa Rosa upon which our entire program is based.

We have another asset in what we are pleased to call a "unified" Health Department. By that I mean that the medical and health set-up are under the direction of one person who is Director of Health of this unified system, and who is also our acting health officer for the duration. By having this unified system we are able to coördinate our case-finding programs in the acute hospital and its out-patient clinics; the Health Department and its various clinics with the tuberculosis hospital and its case-finding projects. In the present set-up we have two assistant health officers, one of whom is in charge of venereal disease control throughout the county, and the other is in charge of the entire tuberculosis program. Our five public health nurses work in the various clinics, under the direction of the three health officers. Consequently, they have first-hand information of the persons attending the clinics, and therefore receive complete instructions on the procedure to follow regarding the care and follow-up of any given patient.

RÔLE OF SONOMA TUBERCULOSIS ASSOCIATION

Our Tuberculosis Association is dovetailed into the program very closely, and it is consulted or directed, as the case may be, regarding all problems in tuberculosis control that arise throughout the county.

Originally, all of our work was done through a biweekly diagnostic and follow-up clinic held at the Sanatorium. Discharged sanatorium patients, contacts, and known arrested cases of tuberculosis were followed in these clinics. It was necessary for patients or children with positive skin tests and their families in all parts of the county to go to the clinics in Santa Rosa. But war made it necessary for us to alter this situation. Consequently, last summer the Tuberculosis Association provided us with a portable fluoroscope. Clinics are still continued at the Sanatorium for the follow-up of our out-patients and for those persons in the Santa Rosa area. We have added to this schedule a fluoroscopic clinic one night each month in the major communities. These clinics have only recently been established; they are entirely voluntary and are arranged by the executive secretary of the Tuberculosis Association. A skin-testing program is continued, not because of the number of cases of tuberculosis found, but rather because the opportunity is maintained to get literature and our public health nurses into many homes. We also skin-test all prenatal cases, as well as all children admitted to our pediatric wards.

We are coöperating closely with the Medical Corps of the induction center of the United States Army. Information is reported regarding possible cases of tuberculosis in any inductee from our county. These persons are promptly contacted by our health nurses and brought into our clinics. Through this method we have seen several persons with evidence of arrested disease. These we continue to follow in our clinics. From this source we have found three cases of active pulmonary tuberculosis.

Following the recent fluoroscopic survey at the Basalt Rock Company in Napa County, we were given forty-one names of workers residing in our county; twenty-six of these had reference to their

* From Oak Knoll Sanatorium, Santa Rosa.

Synopsis of a paper read before the California Trudeau Society and the California Tuberculosis Association, Fresno, April 7, 1943, in symposium on "War-Time Tuberculosis Case Finding."

lungs. From this list we have hospitalized two cases of active disease.

Since September, 1942, we have fluoroscoped 650 high school seniors. Fifteen x-rays were ordered. One case of active tuberculosis was hospitalized and two cases of suspected tuberculosis are now under close observation. We have fluoroscoped 550 adults. Ten x-rays were ordered. One case of active tuberculosis was hospitalized and two cases of suspected tuberculosis are under close observation. The statistics given do not include the 3,000 fluoroscopies done in the Sanatorium clinics. I believe that the persons seen with our portable unit would not have responded had it been necessary for them to come to Santa Rosa. This year we have done 2,502 skin tests on children in the kindergarten, first, fourth, seventh, and ninth grades, and all new students. These do not include any who had positive skin tests in previous years. Out of this group we found 207 positive reactors, all of whom, with as many of their contacts as we could induce to come to the clinics, were fluoroscoped.

RECENT ADMISSIONS TO OAK KNOLL SANATORIUM

Nearly all of our recent admissions to the Sanatorium are men. This is probably due to the fact that when the men, as heads of families, are receiving large wages they are able to provide private care for their dependents. If, on the other hand, the men develop tuberculosis, their income ceases immediately and they are forced to enter the county institution.

At the present time the majority of cases of active tuberculosis are being found from one of the following three sources: (1) Those admitted to the acute hospital and diagnosed after having been admitted for some other complaint. (2) Those persons who voluntarily present themselves at our clinics for examination. (3) Those cases that are picked up by our doctors in private practice. Most of the doctors in our county are now skin-testing and fluoroscoping the patients coming into their offices.

WORK AMONG CIVILIANS

Our immediate problem is how to reach the small groups of employees found in the dairies, chicken ranches, and other minor industries. We plan to purchase a trailer in which we can set up our fluoroscope in a dark room, have some small dressing cubicles, and a desk for a secretary. This trailer could be driven to any one of these plants at any time and the entire personnel examined. This would be done only after the proper groundwork had been laid by the Tuberculosis Association. We plan to go with our fluoroscope into the larger industries as soon as permission can be obtained.

Up to the present we have not been able to satisfactorily solve the problem of the defense workers living in our county and working elsewhere. These persons are scattered throughout every town and many are living in trailer camps. Over and above that, they work very irregular hours. All of this results in a poor response to any voluntary plan for fluoroscoping these persons. I would like to suggest that perhaps the best way for these persons to be surveyed would be in the large industries in their respective counties, following the lead of the Basalt Rock Company. The entire plant personnel could be fluoroscoped. If the results were given officials in the home county of the employees, all contacts and suspicious persons could be followed. There is one loophole in this scheme. Several persons, when told to see their private physician following the Basalt survey, did not appear. When attempts were made to contact them they had already left their jobs and moved out of the county. Probably these persons previously knew they had tuberculosis and, since jobs are plentiful, merely moved to another community in order that their condition might not be suspected. This would occur in a very small percentage of cases.

Finally, there is the question of our transient population who work in the fruit industry for three or four months each year. We are at a loss to know how to properly solve this problem with them.

IN CONCLUSION

The battle against tuberculosis in Sonoma County was started in earnest on January 1, 1938, with the establishment of a full-time health department. At that time the death rate was given as 72 per 100,000. At the end of the fiscal year, 1942, however, our death rate was computed to be 33.7 per 100,000.

Sonoma County Hospital.

THE CYSTIC LUNG*

LOUIS J. RUSCHIN, M. D.
San Leandro

THERE is no unanimity of opinion regarding the etiologic factor in certain pulmonary cystic structures. This is due to the fact that more than one factor may operate in several instances of pulmonary cystic structures.

An etiologic classification of pulmonary cystic cavernous structures is submitted, but only those disorders about which there is no unanimity of opinion will be discussed, namely, true congenital pulmonary cysts, emphysema, and acute localized emphysematous bullae.

TRUE CONGENITAL CYSTIC LUNG

The greatest variance of opinion exists concerning the occurrence and frequency of congenital cystic lung. Pierce and Dirkse[1] considered true congenital cysts in adults to be rare, and believed that the assumption of the congenital nature was too often founded upon insufficient evidence—due to inadequate antecedent history, and incomplete evaluation of respiratory diseases by the physician.

PATHOGENESIS

Heuter,[2] in 1914, believed that pulmonary cysts developed as a result of stenosis of bronchial

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* From the Fairmont Hospital, San Leandro.
Read before the California Trudeau Society at Fresno, April 8, 1943.